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| 09/929,323 | 08/14/2001 | Lester J. Chong | PD-201134 | 8664 |
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| THE DIRECTV GROUP INC | | | MERED, HABTE | |
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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/929,323

Applicant(s)

CHONG ET AL

Examiner

Habte Mered

Art Unit

2662

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 August 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. **Claims 1-12** are rejected under 35 U.S.C. 103(a) as being unpatentable over Huotari et al (US Pub. No. 2002/0004935), hereinafter referred to as Huotari, in view of Wang et al (US 6, 636, 505), hereinafter referred to as Wang.

*Regarding **claims 1 and 12**, Huotari discloses a system that provides automated installation and configuration of DSL modems and associated user systems without a user having any knowledge of the operating or networking system. The system disclosed by Huotari just like the applicant's invention stops the need for sending a technician to the customer premises (i.e. truck roll), the need for logging in each time a connection is established as it assigns a static IP address to the DSL modem, and the need to use a domain name when establishing a PPP session. (See Paragraph 11)*

Huotari discloses a computer-implemented method and system for provisioning broadband service in a Point-to-Point Protocol over Ethernet (PPPoE) network, **(PPP is the common protocol for service provisioning circuit-switched telephone networks. It is also considered a good choice for the delivery of broadband services since it has built-in mechanisms for IP address assignment, layer-2 security, and a means for authentication/authorization/accounting. A PPPoE**

network is a PPP connection at an Ethernet-based host. The host is simply a PC with an Ethernet NIC and can provide access based on DSL modem that supports PPP between end users and ISPs/NSPs since ISPs/NSPs already have infrastructure to support dial-up access based on PPP. Huotari discloses an end user system shown in Figure 1 as element 105 and has a PC and a DSL modem establishing a PPPoE network. See Paragraphs 55 and 56) comprising: transmitting an authentication request from a modem to multiple domain names over a PPPoE network; and receiving authorization from at least one of the domain names (See Paragraphs 68 and 69. Huotari discloses a method as shown in Figure 3 whereby an authentication request is initially sent to the Service Provider 110 via user data file 300. The user file data is shown in Figure 4 and contains domain name, login name and login password. Huotari discloses three different automatic installation methods of which the first two provide the same result as the applicant's invention. Namely, Figure 6 describes a dial-up installation process and Figure 7a pre-set installation process. (See Paragraph 106) In Figure 7, the end user using a CD provided by the service provider that contains configuration file can configure the DSL modem by going through the steps shown in Figure 7. Going iteratively through the steps in Figure 7, at step 615, if the local configuration file ATM encapsulation value is the same as that of PPPoE (i.e. RFC 2516 - see Paragraph 104) then it goes straight to step 622. At step 622, the pre-set installation program asks the user for ISP supplied PPP username and password and right after that sends the authorization request, which includes the

username, password and the domain name of the ISP. In this case, the end user is completely shielded from knowledge of the ISP/domain name. (See Paragraph 108) There is really no need to send multiple domain names in most cases in provisioning broadband services for residential use as the end user normally subscribes to a single ISP.)

Huotari, however, fails to expressly disclose that multiple authorization requests to multiple domain names can be sent from a single modem.

Wang discloses a method of automatically provisioning a broadband communication service to a subscriber using a broadband or DSL modem. The broadband service is provided over a Point-to-Point over Ethernet (PPOE) network (See Figures 3, 4, 8 and 13). The DSL modem will receive the domain names of reachable service providers (See Column 9, Lines 58-67 and Column 10, Lines 44-49) in the form of a User Profile (and is stored in the modem as shown in Table 6). Wang shows that the DSL modem will let the user select a service provider and send an authentication request. The user can select more than one service providers (i.e. **domain name**) and fill out a username and password (**as shown in Figures 6 and 14**) and then can send the requests to the service providers. Wang discloses that the user can have concurrent connections to different ISPs. (**See Column 10, Lines 10-24 and 56-60**).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Huotari's method to incorporate a step in the DSL modem configuration and installation procedure to allow sending authentication requests to

more than one domain names/ISPs, the motivation being simplification and complete automation of broadband modem installation for end users interested in accessing any number of ISPs they are registered with.

3. Regarding **claim 2**, Huotari and Wang disclose all aspects of the claimed invention as set forth in the rejection of claim 1 including, prior to the transmitting step, the step of providing a modem that include a list of multiple domain names, where each of the domain names is associated with a different Broadband Service Node (BSN). **(Wang provides a method whereby a list of reachable ISPs (i.e. multiple domain names) is provided to the modem and the user selects the appropriate ISPs or domain names. Wang provides a simplified graphical user interface where the end user can choose the domain names presented as the regular names of the ISPs and should be easy for the end user to pick the appropriate domain name. See Wang Column 9, Lines 58-67 and Wang Column 10, Lines 44-49. Each element 100 in Wang's Figures 1-4 is a unique broadband service node and represents different ISPs or domain names. See also Wang Column 9. Lines 24-30 and Wang Column 10, Lines 44-50.)**

4. Regarding **claim 3**, Huotari and Wang disclose all aspects of the claimed invention as set forth in the rejection of claim 1 including, prior to the transmitting step, the step of establishing a PPPoE session. **(It is important to note that the applicant divides the PPPoE session into two components as indicated in the applicant's specification on the last paragraph of page 11: Discovery and PPP session. Wang shows in Figure 5 a detailed service provisioning flow. Prior to establishing the**

PPP session Wang shows a series of steps in Wang's Figure 5, before the PPP session is started and the authentication request is transmitted, which constitute a Discovery phase of the PPPoE session. Therefore, in Wang's method the PPPoE session is also established prior to transmitting the authentication requests. See also Column 9, Lines 58-67 and Column 10, Lines 1-25)

5. Regarding **claim 4**, Huotari and Wang disclose all aspects of the claimed invention as set forth in the rejection of claim 1 including, prior to the transmitting step, the modem requests only a single identifier from a user of a client computer and receives and stores the identifier. **(Huotari discloses that if the Dial-Up Installation Process shown in Huotari's Figure 6 is used then the user of the client computer has to supply a single identifier, which is the ISP provided username. If the Pre-Set Installation Process is used as shown in Figure 7 and the session is a PPPoE then at step 622 the user of the client computer has to supply a single identifier, which is an ISP provided PPP user name. See also Paragraphs 88, 107 and 108)**

6. Regarding **claim 5**, Huotari and Wang disclose all aspects of the claimed invention as set forth in the rejection of claims 1 and 4 including wherein the transmitting step comprises transmitting an authorization request containing the identifier and a generic password to each of the multiple domain names. **(Huotari discloses a method of transmitting an authorization request containing a user name as the identifier and a password and sending it to a single domain name. See also Paragraphs 68, 69 and Figure 3. Wang discloses that an authorization request containing the user name and the password can be sent to multiple domain names or ISPs. See**

Column 9, Lines 58-67; Column 10, Lines 44-49; Column 10, Lines 10-24 and 56-60; Figures 6 and 14. However, the value of the password being transmitted can be unique for each user or generic. If generic value is used it makes the installation process easy but introduces a measure of insecurity and vulnerability for the ISP and end user. On the other hand unique passwords can make the installation process more cumbersome but provide a higher level of security. Therefore, the determination of the value of the password is really a design and operations issue.)

7. Regarding **claim 6**, Huotari and Wang disclose all aspects of the claimed invention as set forth in the rejection of claim 1 including, wherein the receiving step comprises acquiring at least one static Internet Protocol (IP) address. **(Huotari discloses a method where the configuration file sent from the ISP contains an IP address for the CPE/DSL Modem and the IP address can either be static or dynamic. See Huotari's Paragraphs 73, 82 and Figure 5C)**

8. Regarding **claim 7**, Huotari and Wang disclose all aspects of the claimed invention as set forth in the rejection of claims 1 and 6 including transmitting a configuration request to an Internet Service Provider (ISP), where the configuration request is addressed from a static IP address; receiving full configuration details from the ISP, where the full configuration details are addressed to the static IP address; and automatically configuring the modem based on the full configuration details. **(Huotari discloses that the static IP address is sent as part of the configuration file and as part of fully configuring the modem the static IP address is assigned to the DSL**

modem. There is no unique advantage in sending the static IP address prior to sending the configuration file.)

9. Regarding **claim 8**, Huotari discloses a system for provisioning broadband service in a Point-to-Point Protocol Over Ethernet (PPPoE) network, comprising: at least one client computer; a modem coupled to the client computer **(See Figures 1 and 2)**, the modem includes a memory comprising: instructions for transmitting an authentication request from the modem to multiple domain names over a PPPoE network; and instructions for receiving authorization from at least one of the domain names. **(PPP is the common protocol for service provisioning circuit-switched telephone networks. It is also considered a good choice for the delivery of broadband services since it has built-in mechanisms for IP address assignment, layer-2 security, and a means for authentication/authorization/accounting. A PPPoE network is a PPP connection at an Ethernet-based host. The host is simply a PC with an Ethernet NIC and can provide access based on DSL modem that supports PPP between end users and ISPs/NSPs since ISPs/NSPs already have infrastructure to support dial-up access based on PPP. Huotari discloses an end user system shown in Figure 1 as element 105 and has a PC and a DSL modem establishing a PPPoE network. See Paragraphs 55 and 56)** comprising: transmitting an authentication request from a modem to multiple domain names over a PPPoE network; and receiving authorization from at least one of the domain names **(See Paragraphs 68 and 69. Huotari discloses a method as shown in Figure 3 whereby an authentication request is initially sent to the Service Provider 110 via**

user data file 300. The user file data is shown in Figure 4 and contains domain name, login name and login password. Huotari discloses three different automatic installation methods of which the first two provide the same result as the applicant's invention. Namely, Figure 6 describes a dial-up installation process and Figure 7a pre-set installation process. (See Paragraph 106) In Figure 7, the end user using a CD provided by the service provider that contains configuration file can configure the DSL modem by going through the steps shown in Figure 7. Going iteratively through the steps in Figure 7, at step 615, if the local configuration file ATM encapsulation value is the same as that of PPPoE (i.e. RFC 2516 - see Paragraph 104) then it goes straight to step 622. At step 622, the pre-set installation program asks the user for ISP supplied PPP username and password and right after that sends the authorization request, which includes the username, password and the domain name of the ISP. In this case, the end user is completely shielded from knowledge of the ISP/domain name. (See Paragraph 108).

Further Huotari discloses an authentication server is coupled to each of the ISPs.
(See Paragraph 58)

Huotari, however, fails to expressly disclose that multiple authorization requests to multiple domain names can be sent from a single modem. Further Huotari fails to disclose multiple Broadband Service Nodes (BSNs) can be coupled to the DSL modem, where each of the multiple domain names is associated with a different one of the multiple BSNs.

Wang discloses that broadband service is provided over a Point-to-Point over Ethernet (PPOE) network **(See Figures 3, 4, 8 and 13)**. Wang also discloses that each of the multiple domain names is associated with a different one of the multiple BSNs. **(Each element 100 in Wang's Figures 1-4 is a unique broadband service node and represents different ISPs or domain names. See also Wang Column 9, Lines 24-30 and Wang Column 10, Lines 44-50.)** The DSL modem will receive the domain names of reachable service providers **(See Column 9, Lines 58-67 and Column 10, Lines 44-49)** in the form of a User Profile **(and is stored in the modem as shown in Table 6)**. Wang shows that the DSL modem will let the user select a service provider and send an authentication request. The user can select more than one service providers (i.e. **domain name**) and fill out a username and password **(as shown in Figures 6 and 14)** and then can send the requests to the service providers. Wang discloses that the user can have concurrent connections to different ISPs. **(See Column 10, Lines 10-24 and 56-60)**

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Huotari's method to incorporate a step in the DSL modem configuration and installation procedure to allow sending authentication requests to more than one domain names/ISPs, the motivation being simplification and complete automation of broadband modem installation for end users interested in accessing any number of ISPs they are registered with.

10. Regarding **claim 9**, Huotari and Wang disclose all aspects of the claimed invention as set forth in the rejection of claim 8 including, a system further comprising:

a Digital Subscriber Line Access Multiplexer (DSLAM) (**Wang's Figure 3, element 90**) coupled between the modem (**Wang's Figure 3, element 110**) and the BSNs (**Wang's Figure 3, elements 100**); an Asynchronous Transfer Mode (ATM) network (**Wang's Figure 3, element 140**) coupled between the DSLAM and the BSNs; and a Broadband Remote Access Server (BRAS) (**Not shown in Figures 2 and 3 but is the Wide Area Concentrator mentioned in Wang's Column 9, Lines 24-30**) coupled between the ATM network and the BSNs.

11. Regarding **claim 10**, Huotari and Wang disclose all aspects of the claimed invention as set forth in the rejection of claim 8 including, a system wherein the BSNs are coupled to the Internet. (**Each element 100 in Wang's Figures 1-4 is a unique broadband service node and represents different ISPs or domain names. See also Wang Column 9, Lines 24-30 and Wang Column 10, Lines 44-50. ISPs sole purpose is to connect users to the Internet and the BSNs have to be coupled to the Internet.**)

12. Regarding **claim 11**, Huotari and Wang disclose all aspects of the claimed invention as set forth in the rejection of claim 8 including, a system wherein the memory further comprises a generic password. (**Both Wang and Huotari provide a means to authenticate the user name and password at the ISP. However, the value of the password being transmitted can be unique for each user or generic. If generic value is used it makes the installation process easy but introduces a measure of insecurity and vulnerability for the ISP and end user. On the other hand unique passwords can make the installation process more cumbersome but provide a**

higher level of security. Therefore, the determination of the value of the password is really a design and operations issue.)

Conclusion

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The following publication is cited to show the state of the art in end-user self-authentication and OSS used by ISPs to support provisioning:

US Pub. No. (2001/0019559) to Handler et al

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Habte Mered whose telephone number is 571 272 6046. The examiner can normally be reached on Monday to Friday 9:30AM to 5:00PM.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou can be reached on 571 272 3088. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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